UNITED STATES MARINE CORPS
TEST MEASUREMENT AND DIAGNOSTIC EQUIPMENT
MARINE CORPS SYSTEMS COMMAND
2033 BARNETT AVENUE SUITE 315
QUANTICO VIRGINIA 22134-5010

IN REPLY REFER TO
5000
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MEMORANDUM

From: Project Officer, Motion Media and Visual Information Technology Systems
To: Team Leader, Visual Information Systems

Subj: **TRIP REPORT FOR PHOTOGRAPHIC MARKETING ASSOCIATION INTERNATIONAL TRADE SHOW**

1. During the period of 24-28 February 2002, I attended the Photographic Marketing Association International trade show in Orlando, Florida. My focus for this trade show was digital still imagery acquisition, production, and digital media.

2. Digital Still Acquisition. Several manufacturers were represented at the trade show. I will discuss each manufacturer separately.

a. Kodak. Kodak has several digital cameras from the consumer, pro-sumer, and professional. Their professional cameras are the staple of combat camera acquisition and continue to provide superb supportability for their professional line of cameras.

b. Nikon. Nikon offers very good professional level cameras and provided valuable information on their new G-series lenses that will soon be available for procurement. However, their supportability is lacking. They only provide a one-year warranty for each camera, and each and every repair after the warranty expires, produces additional O&M cost for maintenance.

c. Olympus. Olympus offers very little in the professional market to compete with Nikon or Kodak. One camera that was quite impressive was the N-20 digital camera. It uses compact flash and smart media simultaneously. It can also accept the new IBM Micro-drive for imagery storage. The current Tactical Photographic Capability within the Intelligence Program would

benefit from this camera. Ease of use and several camera lens options lend themselves to this requirement.

d. Fuji. Fuji now offers a newer version of its professional grade camera, the Fine Pix S2. This camera has good resolution, but like Nikon, lacks the supportability needed by our program.

e. Conclusion and Recommendation. Continue to procure Kodak Professional Cameras. The initial investment is a little higher than the other manufacturers, but the supportability is key to the sustaining this capability for a longer period of time.

3. Digital Production. I will discuss two different areas in the production capability; (1) Photographic Printers, and (2) Large-format (poster) printers.

a. Photographic Printers.

(1) Kodak ML-500 Dye Sublimation Printer. This printer was code-named the Fireball printer. It is designed to be a printing workhorse for massive printing capability. ROM for price for print is $.90 per 8x10. Very quick printer and Kodak's support agreement for this new product is exceptional. This printer utilizes IEEE-1394 (Firewire) as its interface with a required print server.

(2) Konica Photo-Grade Inkjet Printer. Very little is known about this printer. The floor model that was present at the trade shown is only in the prototype phase. Konica has figured out how to inject its ink through a proprietary laminate paper. Since inkjet printers are cheaper to procure and have a cheaper O&M supply costs, this will affect O&M cost for the using units down the road.

(3) Noritsu 3000 Series Digital Photographic Printers. These printers have a high yield for production. Unfortunately, these printers use conventional RA4 color process, which creates the additional problem of chemical based printing and hazardous materials handling and disposal.

(4) Fuji Pictography Series. This series still is a viable option for professional dye sublimation printing.

Initial investment is lower than that of the Kodak ML-500, but support agreements are procured in single year increments.

b. Conclusion and Recommendation. Continue to maintain existing Fuji Pictography printers. Future procurement for initial fielding or replacement should be the Kodak ML-500 printers. Continue to research and request for information on the Photo Grade Inkjet Printer from Konica.

c. Large Format (Poster) Printers. I looked at several poster printers from several different manufacturers, the result of which is listed below:

(1) Kodak 5260. This printer is the first Piezo printer that actually prints as fast as an inkjet printer. In the lowest resolution setting, this printer emulates approximately 600dpi at a rate of 500sq/ft/hr. Utilizing a 1:50,000 map of 2'x3' as a base, this can be interpreted as approximately 83 maps per hour. To compare this with currently fielded large format printers, our present inkjet printers can only print about 10 of these maps per hour. This printer has a considerable initial investment, but has a logistical tail that would benefit its procurement for the Marine Corps. This printer utilizes IEEE-1394 as its interface with a workstation or print server.

(2) Oce' Lightjet 500 and 430. These printers offer outstanding prints at a very high resolution and a very fast speed. The only drawback to the system is that this printer merely exposes poster sized photographic paper that must be processed with a chemical based processor such as the large format Kreonite processor. This presents us with hazardous chemical handling, waste, and disposal. This would be very detrimental to our current procurement philosophy of chemical free photo labs.

(3) Hewlett Packard 5000. This inkjet printer is by far one of the fastest large format printers. It can print 589sq/ft/hr at 600dpi. Using my previously mentioned map size, it could print 98 maps per hour. It is inkjet based, so this can affect accuracy for such requirements as maps, and most inkjets have a tendency to show their actual dots when printed. This leaves the undesirable effect of an extremely pixilated image in the final product.

d. Conclusion and Recommendation. Maintain current inventory of Hewlett Packard Inkjet printers through their current life cycle. Replace with Kodak 5260 when life expectancy has reached its end. Recommend all future procurement for the Kodak 5260 printer based upon supportability and capability.

4. Digital Media. I could only find three digital media companies at the trade show. We must keep in mind that these media devices should be treated as O&M products after initial procurement. Current market trends are going away from PCMCIA cards, which currently is the media that we use. Future technology points to Compact Flash and the new IBM Micro-Drive, which is based on the Compact Flash architecture. I will discuss each of these three vendors and their products.

a. Lexar Media. Lexar manufactures every digital media now used in the digital photographic market. These include PCMCIA, Compact Flash, Smart Media, Memory Stick, and even their own version of the new IBM Micro-Drive. They are extremely affordable and select direct to the government. We have used this company's media exclusively over the past two years and have had very few problems.

b. Memorex. Memorex also manufactures all of the digital photographic media, and offers equitable prices to that of Lexar. I cannot attest to the reliability of their media, but I would recommend a test and evaluation for this company's media.

c. SanDisk. SanDisk also manufactures all of the digital photographic media, and offers equitable prices to that of Lexar and Memorex. Some of our units have procured SanDisk products to replace their Lexar media that has failed or needed to be replaced. In every instance that I can recall, the SanDisk media has failed after a relatively short period of time, or was not able to be formatted and used at all.

d. Conclusion and Recommendation. Maintain procurement of Lexar media. Test and evaluate Memorex media at the Using Units, or test and evaluate through MCOTEA or a third party.

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5. Point of contact on this memorandum is SSgt Maynard at DSN 278-0609 or via e-mail at maynardma@mcsc.usmc.mil.

M. A. Maynard

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